Table 2-1: ADS-B Aircraft System Classes
(adapted from RTCA DO-242, Table 3-1)

CLASS	SUBSYSTEM	CAPABILITIES	FEATURES	COMMENTS
Interactive Aircraft/Vehicle Participant Systems (Class A)				
A_0	Minimum Interactive Aircraft/Vehicle	Aid to Visual Acquisition.	Lower transmit power and less sensitive than Class A_1.	Minimum interactive capability with CDTI.
A_1	Basic Interactive Aircraft	A_0 Plus Conflict Avoidance.	Standard Tx and Rx. Antenna Diversity (Note)	Provides ADS-B based conflict avoidance and interface to current TCAS surveillance algorithms/displays.
A_2	Enhanced Interactive Aircraft	A_1 Plus Separation Assurance and Sequencing.	Standard transmit power and more sensitive receiver. Interface with avionics source required for TCP data. Antenna Diversity (Note)	Baseline for separation management employing intent information.
A_3	Extended Interactive Aircraft	A_2 Plus Flight Path Deconfliction Planning.	More sensitive receiver. Interface with avionics source required for TCP and TCP+1 data. Antenna Diversity (Note)	Extends planning horizon for strategic separation employing intent information.
Broadcast-Only Participant Systems (Class B)				
B_1	Aircraft Broadcast Only	Supports visual acquisition and conflict avoidance for other participants.	Transmit power may be matched to coverage needs. Nav data input required.	Enables aircraft to be seen by Class A and Class C users.
B_2	Ground Vehicle Broadcast Only	Supports visual acquisition and conflict avoidance on airport surface.	Transmit power matched to surface coverage needs. High accuracy Nav dat input required.	Enables vehicle to be seen by Class A and Class C users.
B_3	Fixed Obstruction	Supports visual acquisition and conflict avoidance.	Fixed coordinates. No Nav data input required. Collocation with obstruction not required with appropriate broadcast coverage.	Enables Nav hazard to be detected by Class A users.
Ground Receive Systems (Class C)				
C_1	ATS En route and Terminal Area Operations	Supports ATS cooperative surveillance.	Requires ATS certification and interface to ATS sensor fusion system.	En route coverage out to 200 ~~nmi.~~NM Terminal coverage out to 60 ~~nmi.~~NM
C_2	ATS Parallel Runway and Surface Operation	Supports ATS cooperative surveillance.	Requires ATS certification and interface to ATS sensor fusion system.	Approach coverage out to 10 ~~nmi.~~NM Surface coverage out to 5 ~~nmi.~~NM
C_3	Flight Following Surveillance	Supports private user operations planning and flight following.	Does not require ATS interface. Certification requirements determined by user application.	Coverage determined by application.

***Note:** See subparagraph 3.3.1 for Antenna Diversity.*